REMARKS

Claims

Claims 1-3, 8-13, 21 and 22 are currently under examination with claims 17-18 withdrawn from consideration due to restriction/election.

Claims 4-7, 14–16 and 19–20 are cancelled without prejudice or disclaimer.

Claim amendments

Amended claims 1 and 9 are supported by the disclosure contained in, for example, paragraph [0041] of the published application.

Claim 13 in its amended form incorporates the elements of claim 15, which is hereby cancelled without prejudice or disclaimer.

It is respectfully submitted that the amendments do not recite new matter. Entry thereof is respectfully requested.

IDS

English language equivalents of foreign patent literature references cited in the IDS filed May 26, 2006 are cited herein US Patent 6,217,866 (corresponds to EP 0359282); US patent application publication No. 20080166346 (corresponds to WO 03/053465); US patent No. 7,060,808 (corresponds to WO 96/40210); US Patent 5,558,864 (corresponds to EP 531472); and US patent application publication No. 20040170632 (corresponds to WO 03/007988).

Withdrawal of the objection is respectfully requested.

Objection

Applicants will amend the specification to include the correct address of the biological depository (American Type Culture Collection), including deposits made therein (with accession numbers, wherever applicable). Inasmuch as Applicants are still in the process of obtaining information on the biological deposits, the Examiner is cordially requested to hold the objection of the specification in abeyance. See, MPEP §714.02.

Biological deposits

The specification of US patent No. 5,558,864, which is referenced in the present application, states that the hybridoma cell line 425 was deposited according to Budapest Treaty at the American Type Culture Collection (ATCC) under the accession No. HB 9629. Although the deposits made therein should satisfy the requirements under 37 CFR §1.803, the Office Action now alleges that the

hybrodoma with the catalog number HB-9629 is currently unavailable via the vendor website. Applicants have contacted ATCC's depository in Manassas, VA to seek clarification on this issue. It is further submitted that the depository might be unaware regarding the issuance of USP 5,558,864, and that restrictions pertaining to the availability of the hybridomas should be lifted, wherever applicable. It is possible that the catalog number for this product might have changed over the years (the '864 patent was issued in September, 1996). Provided that the deposit is currently available, Applicants will provide a statement in conformance with the provisions under the Budapest treaty along with agreeing to remove all restrictions with respect to public accessibility thereto. See, for example, the paragraph bridging pages 7 and 8 of the Office Action.

Even if ATCC deposits of HB 9629 were currently inaccessible, the US courts have held that even "the availability of a sample to the public after the patent has issued will meet the enablement requirement." This means that if the PTO's contentions regarding the lack of commercial and/or public availability of HB 9629 were true, then in order to satisfy the enablement requirements, a deposit of biological material (i.e., antibodies) could be subsequently made after the issuance of the patent. See, *In re Lundak*, 773 F.2d 1216, 227 USPQ 90 (Fed. Cir. 1985) and MPEP §2406.01.

With respect to the hybridoma cell-lines which produce the antibody molecules described in US 6,217,866 (ATCC catalog Nos. HB 9763 and 9764), Applicants have contacted Patent Deposit at ATCC and are seeking comments/certification regarding "public availability" of the deposits referenced therein.

As such, the Examiner is requested to hold this rejection in abeyance until information pertaining to the hybridomas can be furnished.

Rejection under 35 U.S.C. §112, ¶2

Applicants thank the Examiner for her careful review of the claims. It is submitted that claim 13 is directed to crystalline form of the claimed antibodies in solid formulations (tablets, depot formulations) and to include solid sustained release or depot formulations.

Withdrawal of the rejection is respectfully requested.

Rejection under 35 U.S.C. §102

Claims 13–14 are rejected as allegedly anticipated by Li et al. (US patent application publication No. 20020197261). The forgoing amendments render this rejection moot. In particular, claim 15 was not rejected under this section and claim 13 incorporates the features of claim 15. No agreement is to be implied. Withdrawal of the rejections is respectfully requested.

Rejections under 35 U.S.C. §112, ¶1

Claims 1-3, 8-13 and 19–22 are rejected under this section due to allegedly failing to provide adequate written description and failing to provide enablement. Applicants respectfully traverse this rejection.

This rejection is directed to the fragments and variants of the claimed antibody molecules. Applicants respectfully submit that this rejection is moot in view of the forgoing amendments. Applicants' amendment of the claims is not to be construed with acquiescence to this or any other ground of rejection. For example, with respect to antibody fragments, methods for generating such, comprising, enzymatic digestion of the Fc portions of antibody molecules to generate antigen-biding portions, were known in the art before the filing date of the instant application. Such antibody fragments could also be generated by recombinant techniques, for example, antibody display libraries.

With respect to the variant sequences, these are explicitly described in terms of four sub-types, each of which were well-understood by a skilled molecular biologist at the time the instant application was filed. Enclosed are Exhibits demonstrating the art-known methods/techniques for generating polypeptide variants based on (a) conserved amino acid substitutions; (b) glycosylation of one or more amino acid residues; (c) deglycosylation of one or more amino acid residues; and (d) PEGylation of one or more amino acid residues. To this end, Henikoff et al. (*PNAS*, 1992) describe methods for alignment of protein sequences using a substitution matrix (BLOSUM), with scores for all possible exchanges of one amino acid with another. The article identifies amino acid residues which allow for conserved substitutions. With respect to glycosylation/deglycosylation, it was known in the art that such comprise six classes, namely (1) N-linked glycans attached to the amide nitrogen of asparagine side chains; (2) O-linked glycans attached to the hydroxy oxygen of serine and threonine side chains; (3) glycosaminoglycans attached to the hydroxy oxygen of serine; (4) glycolipids in which the glycans are attached to ceramide; (5) hyaluronan which is unattached to either protein or lipid; and (6) GPI anchors which link proteins to lipids through glycan linkages. Of these, (1)–(3) are directly concerned with proteins/polypeptides, such as the antibody molecules of the present invention. With respect to PEGylation, the choice of the suitable functional group in proteins comprises amino acid residues such as, for example, lysine, cysteine, histidine, arginine, aspartic acid, glutamic acid, serine, threonine, and tyrosine. The N-terminal amino group and the C-terminal carboxylic acid can also be used.

As such, the structures of the variant molecules are now explicitly described, and methods for making such were known in the art as of the filing date of the instant application. Withdrawal of the rejection is respectfully requested.

The Commissioner is hereby authorized to charge any fees associated with this response to Deposit Account No. 13-3402.

Respectfully submitted,

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